

Contribution to the Study of Spiders (Araneae) on Šar Planina Mountain, North-Western Macedonia

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Abstract

A total of 138 species from 22 families (Scytotidae-1, Segestriidae-1, Dysderidae-3, Theridiidae-13, Lyniphiidae-13, Tetragnathidae-3, Araneidae-14, Lycosidae-23, Pisauridae-1, Agelenidae-5, Cybaeidae-2, Dictynidae-1, Amaurobiidae-3, Miturgidae-5, Liocranidae-1, Zodariidae-1, Gnaphosidae-17, Zoridae-1, Sparassidae-1, Philodromidae-7, Thomisidae-11, Salticidae-11) have been found on Šar Planina Mountain. 106 of them are new to the study area, 27 are new to the Macedonian fauna. The spiders on Šar Planina Mountain are classified into 15 zoogeographical categories.

Key words: Araneae, Šar Planina Mt., Macedonia, zoogeographical categories.

Извод

Вкупно 138 вида пајаци од 22 фамилии (Scytotidae-1, Segestriidae-1, Dysderidae-3, Theridiidae-13, Lyniphiidae-13, Tetragnathidae-3, Araneidae-14, Lycosidae-23, Pisauridae-1, Agelenidae-5, Cybaeidae-2, Dictynidae-1, Amaurobiidae-3, Miturgidae-5, Liocranidae-1, Zodariidae-1, Gnaphosidae-17, Zoridae-1, Sparassidae-1, Philodromidae-7, Thomisidae-11, Salticidae-11) се најдени на Шар Планина. Од нив 106 се нови за проучуваното подрачје, 27 се нови за фауната на Република Македонија. Пајациите на Шар Планина се класифицирани во 15 зоогеографски категории.

Клучни зборови: Araneae, Шар Планина, Македонија, зоогеографски категории.

INTRODUCTION

The first report that deals with the spider fauna of Šar Planina Mountain was published by Kratochvíl (1935) who recorded 6 species from which 2 are described for the first time (*Dasumia kusceri* and *Dysderocrates storkani*). Šilhavý (1944) reports 5 other species.

New data can be found in the papers of Blagoev (1999) and Deltšev et al. (2000). Paper of Blagoev (1999) is the only detailed study of spider fauna of Šar Planina Mountain in which 30 species of family Lycosidae are reported. Deltšev et al. (2000) published data about 8 species. Thus, the total number of species reported for Šar Planina Mountain up to present study is 43 of 5 families.

STUDY AREA

Šar Planina Mountain is situated in the north-western corner of Republic of Macedonia. It is one of the highest (Titov Vrv, 2748 m a.s.l.) and according to the surface, one of the largest mountains on the Balkan Peninsula.

Studied area (Fig. 1) in 1995 was in the vicinity of mountain hut "Jelak" (central part of the mountain), and in 1998 in the broader region of v. Gorno Jelovce (southern part of the mountain).

The list of massifs, localities, altitudes, biotopes and dates are presented:

A. Kuči Baba, Petkovi Mlaki 1400 – 1800 m, high-mountain pasture, 14.07.1998.

B. Dedelbeg, 1500 – 1600 m, beech forest, 11.07.1998.

C. From Mountain hut Šarski Vodi to v. G. Jelovce in

length of 2 km, 1300 - 1250 m, near road, 17.07.1998.

D. From Mountain hut Šarski Vodi to v. G. Jelovce in length of 3 km, 1300 - 1240 m, near road, 10.07.1998.

E. Near Mountain hut Šarski Vodi, 1300 m, traps: beech forest, 09 – 19.07.1998.

F. Bojkov Kamen and Stara Korija, 1200 m, mixed forest of *Acer sp.* and *Quercus cerris*, 13.07.1998.

G. Dedelbeg, above shipfold, 1700 – 1800 m, high-mountain pasture, 11.07.1998.

H. Govedarnik, 2100 m, high-mountain pasture, 14.07.1998.

I. Above Monastery St. Mina, 1350 m, beech forest, 17.07.1998.

J. Above v. Dolno Jelovce, 1250 m, near road, 17.07.1998.

K. Above v. Dolno Jelovce, 5 km from Mountain hut Šarski Vodi, 1250 - 1100 m, near road, 17.07.1998.

L. Above v. Gorno Jelovce, 1250 - 1400 m, near road, 11.07.1998.

M. Govedarnik - Crni Steni 2100 – 2400 m, high-mountain pasture, 18.07.1998.

N. v. G. Jelovce - shipfold, 1220 – 1700 m, near road, 18.07.1998.

O. Mountain hut Šarski Vodi, 1300 m, 09.07.1998.

P. Mountain hut Šarski Vodi, 1300 m, 12.07.1998.

Q. Mountain hut Šarski Vodi, 1300 m, 16.07.1998.

R. Mountain hut Šarski Vodi, 1300 m, traps: meadow, 10 - 20.07.1998.

S. v. Gorno Jelovce, 1260 m, near road, 08.07.1998.

T. Mountain hut Jelak, 1850 m, 13.07.1995.

U. Mountain hut Jelak, 1850 m, 07 – 12.07.1995.

V. Mountain hut Jelak, 1850 m, Ceripašina, 2530 m., 09.07.1995.

- W. Mountain hut Jelak, 1850 m, traps: Piceetum, 10 – 19.07.1995.
 X. River Studena 1730 m, Piceeto-Fagetum, 10.07.1995.
 Y. River Studena, 1730 m, traps: Piceeto-Fagetum, 10–19.07.1995.

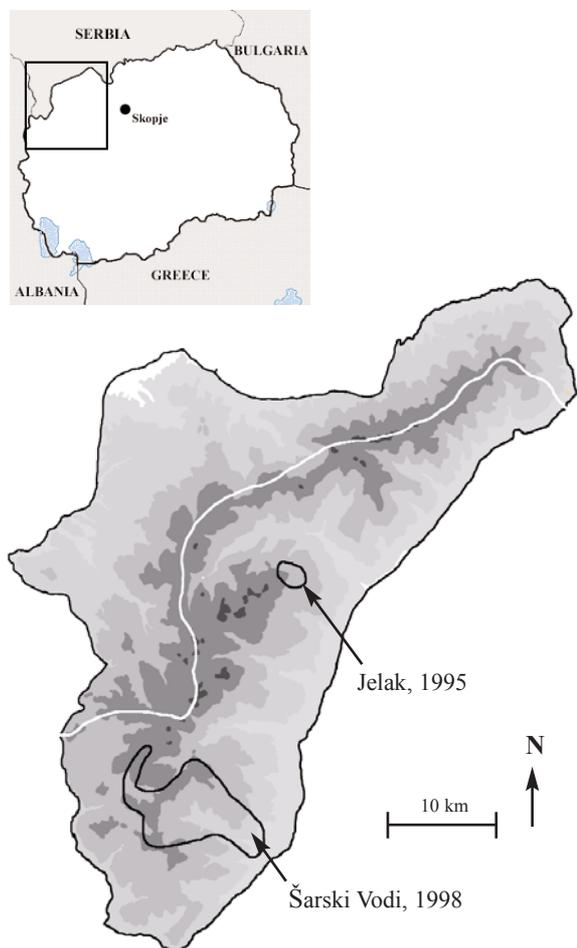


Fig. 1. Map of the studied area on Šar Planina Mt., north-western Macedonia

Слика 1. Мапа на истражуваното подрачје на Шар Планина, северозападна Македонија

MATERIALS AND METHODS

The present study is a result of the investigation of the spiders (Araneae) on Šar Planina Mt., conducted in the period 07-12.07.1995 and 08-22.07.1998 in the frame of research expedition “Qualitative investigation of flora and fauna on Šar Planina Mt.”, organized by the Biology Students' Research Society. The spiders were collected by hand and by pitfall traps in different biotopes. The materials are kept in the collections of Biology Students' Research Society.

The systematic arrangement of taxa in this study was followed from Platnick (2002).

RESULTS AND DISCUSSION

A total of 138 species from 22 families were found: Scytotidae-1, Segestriidae-1, Dysderidae-3, Theridiidae-13, Lynphiidae-13, Tetragnathidae-3, Araneidae-14, Lycosidae-23, Pisauridae-1, Agelenidae-5, Cybaeidae-2, Dictynidae-1, Amaurobiidae-3, Miturgidae-5, Liocranidae-1, Zodariidae-1, Gnaphosidae-17, Zoridae-1, Sparassidae-1, Philodromidae-7, Thomisidae-11, Salticidae-11 (Tab. 1). From this number, 106 species are new to the study area, 27 are new to the Macedonian fauna (Blagoev 2002, in press.). The number of species is low and represents about 25 % of the Macedonian araneofauna. Compared with the number of spiders recorded from the other mountains in Bulgaria, Pirin – 321 (Deltshev & Blagoev 1997), Rila – 280 (Deltshev et al. 2000a), Central Balkan – 270 (Deltshev et al. 2000b), Vitosha – 154 (Deltshev 1967), the number of spiders on Šar Planina Mountain shows that further research will increase the number of species on Šar Planina Mt. The families Lycosidae (16.7 %), Gnaphosidae (12.3 %), Araneidae (10.1 %) and Salticidae (8.0 %) are richest in species. Genera with the greatest number of species are Pardosa (10), Xysticus (9), Alopecosa (6), Araneus (5), Cheiracanthium (5), and Micaria (5).

The spiders on Šar Planina Mountain are classified into 15 zoogeographical categories (Tab. 1 and Fig. 2.). The character of the spider fauna is defined by the presence of Palaearctic and European species. There are 62 Palaearctic species (44.9 %) and 26 (18.8 %) Holarctic species. European species are represented by 15 species or 10.9 % (Fig. 2).

The discovery of *Cheiracanthium rupestre* Herman, 1879 should be emphasised. Known from Romania, Hungary, Slovenia and Croatia, for the first time this species is found in Macedonia.

The finding of some other species should be noted as well.

Cybaeus balkanus was recently described by Deltshev (1997) from Šar Planina Mt. and this is a second finding from same locality. This spider is a Balkan endemic and outside Macedonia is known only from Bulgaria.

Dysderocrates storkani was originally described by Kratochvíl (1935) in the genus *Harpactocrates* from Šar Planina Mt. and placed by Deeleman-Reinhold & Deeleman (1988) into new genus *Dysderocrates* as type species. This species is a Balkan endemite and it is known from Macedonia, Albania and Serbia.

The species *Xysticus macedonicus* that was originally described by Šilhavý, 1944 from Jablanica Mt. in western Macedonia, has never been found until now on other locality in Macedonia. This is the first finding since then and second locality for Macedonia. According to Deltshev et al. (2000a), *Xysticus macedonicus* is characteristic for the sub-alpine zone, but this species can be found at the lower altitudes (Jantscher 2001). On Šar Planina Mt. it was found in a beech forest. It is a Balkan endemic species, as well.

For the species *Zodarion ohridense* Šar Planina

Table 1. Species composition, habitats and zoogeographical classification of spiders on Šar Planina Mountain.

Табела 1. Список на видови, со нивните живеалишта и зоогеографска класификација на пајациите на Шар Планина

No	Taxa	Localities & Habitats	Zoog. cat.
SCYTOTIDAE			
1	* <i>Scytodes thoracica</i> (Latreille, 1802)	U (1♀)	HOL
SEGESTRIIDAE			
2	* <i>Segestria senoculata</i> (Linnaeus, 1758)	O (1♀), F (1♀), S (2♀♀)	PAL
DYSDERIDAE			
3	** <i>Dysdera ninnii</i> Canestrini, 1868	P (1♂)	SEU
4	<i>Dysderocrates storkani</i> (Kratochvíl, 1935)	U (1♀)	BALK
5	** <i>Harpactea saeva</i> (Herman, 1879)	E (3♀♀, 7 juv.)	EEU
THERIDIIDAE			
6	** <i>Dipoena melanogaster</i> (C. L. Koch, 1837)	E (1♂)	WPA
7	* <i>Enoplognatha latimana</i> Hippa & Oksala, 1982	A (1♀), O (1♀), F (2♀♀)	HOL
8	* <i>Enoplognatha ovata</i> (Clerck, 1757)	R (1♀)	HOL
9	* <i>Episinus truncatus</i> Latreille, 1809	P (1♂)	PAL
10	* <i>Neottiura suaveolens</i> (Simon, 1879)	R (1♀)	ECA
11	* <i>Steatoda albomaculata</i> (De Geer, 1778)	A (1♀)	COS
12	* <i>Steatoda bipunctata</i> (Linnaeus, 1758)	X (1♀)	HOL
13	* <i>Steatoda phalerata</i> (Panzer, 1801)	T (1♀, 2♂♂), U (2♀♀, 1♂), K (1♀), O (1♀)	PAL
14	<i>Steatoda triangulosa</i> (Walckenaer, 1802)	U (2♀♀)	COS
15	* <i>Theridion impressum</i> L.Koch, 1881	X (1♂), U (1♀), A (1♀ juv.), F (2♂♂, 3 juv.), K (1♀, 1♂), O (1♀), R (2♂♂, 3 juv.)	HOL
16	* <i>Theridion pinastris</i> L. Koch, 1872	K (1♀)	PAL
17	* <i>Theridion sisyphium</i> (Clerck, 1757)	X (1♂), N (1♀), O (1♀)	PAL
18	* <i>Theridion nigrovariegatum</i> Simon, 1873	F (1♀, 2 juv.), K (1♂, 2♀♀)	PAL
LYNIPHIIDAE			
19	** <i>Dicymbium nigrum</i> (Blackwall, 1834)	O (1♀)	PAL
20	* <i>Diplostyla concolor</i> (Wider, 1834)	Y (1♀)	HOL
21	* <i>Erigone dentipalpis</i> (Wider, 1834)	R (4♂♂, 2♀♀), W (3♂♂)	HOL
22	* <i>Frontinellina frutetorum</i> (C. L. Koch, 1834)	K (1♀), D (1♀)	PAL
23	* <i>Lepthyphantes leprosus</i> (Ohlert, 1865)	E (1♂), F (1♀, 4 juv.)	HOL
24	* <i>Linyphia hortensis</i> Sundevall, 1830	K (1♀), U (1♀)	PAL
25	** <i>Mecopisthes silus</i> (O. P. - Cambridge 1872)	Y (1♂)	EUR
26	* <i>Meioneta rurestris</i> (C. L. Koch, 1836)	F (1♂, 2 juv.)	PAL
27	* <i>Microneta viaria</i> (Blackwall, 1841)	Y (1♂)	HOL
28	* <i>Neriere emphana</i> (Walckenaer, 1842)	F (1♀, 2 juv.), U (1♀, 1♂), L (1♀)	PAL
29	* <i>Neriere peltata</i> (Wider, 1834)	X (2♀♀), U (1♀)	PAL
30	** <i>Scotargus pilosus</i> Simon, 1913	Y (1♀)	PAL
31	** <i>Tiso vagans</i> (Blackwall, 1834)	R (4♀♀)	EUR
TETRAGNATHIDAE			
32	* <i>Metellina segmentata</i> (Clerck, 1757)	U (1♀), N (1 juv.), K (1 juv.), D (1 juv.), B (1♂)	HOL
33	* <i>Pachygnatha degeeri</i> Sundevall, 1830	R (1♀, 1♂)	PAL
34	* <i>Zygiella montana</i> (C.L.Koch, 1834)	X (1♂, 2♀♀)	PAL

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No	Taxa	Localities & Habitats	Zoog. cat.
ARANEIDAE			
35	<i>Aculepeira ceropegia</i> (Walckenaer, 1802)	U (2♀♀), A (1♀), L (2♀♀), N (1♀), G (1♀), F (1♀), S (2♀♀, 1♂), P (2♂♂)	PAL
36	** <i>Araneus alsine</i> (Walckenaer, 1802)	P (1♂)	PAL
37	* <i>Araneus angulatus</i> Clerck, 1757	A (1♀), I (1♀, 1♂), F (1♀), C (1♀), S (1♀)	PAL
38	<i>Araneus diadematus</i> Clerck, 1757	U (2♂♂ juv.), A (1♀, 2♂♂ juv.), K (1♀ juv.), O (1 juv.), F (2♀♀ juv.), B (1♀ juv.)	HOL
39	* <i>Araneus grossus</i> (C.L.Koch, 1844)	A (1♀)	ECA
40	* <i>Araneus quadratus</i> Clerck, 1757	U (1♀ juv., 1♂), A (1♀ juv.)	PAL
41	** <i>Araniella alpica</i> (L. Koch, 1869)	V (2♀♀), U (1♀), A (1♀), F (1♀)	EUR
42	* <i>Araniella cucurbitina</i> (Clerck, 1757)	U (1♀), N (1♀), K (1♀), O (1♀, 1♂), P (1♀, 1♂), F (1♀)	PAL
43	* <i>Araniella inconspicua</i> (Simon, 1874)	B (1♀)	PAL
44	* <i>Araniella opisthographa</i> (Kulczynski, 1905)	A (1♀), K (1♀), F (1♀), D (1♀), P (1♀)	ECA
45	* <i>Cyclosa conica</i> (Pallas, 1772)	O (1♀), F (1♀), S (1♀ juv.)	HOL
46	* <i>Larinioides patagiatus</i> (Clerck, 1757)	U (1♀), A (2♀♀)	HOL
47	* <i>Mangora acalypha</i> (Walckenaer, 1802)	K (1♀)	PAL
48	* <i>Zilla diodia</i> (Walckenaer, 1802)	N (1♀)	MCA
LYCOSIDAE			
49	<i>Alopecosa accentuata</i> (Latreille, 1817)	E (1♀), T (1♀), U (1♀), K (1♀ juv.)	PAL
50	* <i>Alopecosa aculeata</i> (Clerck, 1757)	R (2♀♀), S (1♂)	HOL
51	<i>Alopecosa cuneata</i> (Clerck, 1757)	T (2♂♂), U (1♀)	PAL
52	<i>Alopecosa inquilina</i> (Clerck, 1757)	V (1♀), U (1♀, 1♀ juv., 1♂ juv.)	PAL
53	<i>Alopecosa pulverulenta</i> (Clerck, 1757)	H (1♀)	PAL
54	<i>Alopecosa trabalis</i> (Clerck, 1757)	D (1♀), E (1♂)	ECA
55	* <i>Arctosa leopardus</i> (Sundevall, 1833)	R (3♂♂)	PAL
56	<i>Hogna radiata</i> (Latreille, 1817)	W (3♀♀), K (1♀)	MCA
57	<i>Pardosa albatula</i> (Roewer, 1951)	V (2♀♀, 2♂♂), U (1♀, 1♂)	EUR
58	<i>Pardosa amentata</i> (Clerck, 1757)	R (1♀)	EUR
59	<i>Pardosa blanda</i> (C.L.Koch, 1834)	E (5♂♂), F (1♀), R (3♀♀, 3♂♂, 3 juv.), U (1♀)	PAL
60	<i>Pardosa hortensis</i> (Thorell, 1872)	R (1♀, 1 juv.)	PAL
61	<i>Pardosa lugubris</i> (Walckenaer, 1802)	E (7♀♀), R (1♀), W (2♀♀, 2♂♂), N (1♀)	PAL
62	<i>Pardosa mixta</i> (Kulczynski, 1887)	V (2♀♀, 2♂♂)	ETU
63	<i>Pardosa monticola</i> (Clerck, 1757)	T (1♀, 2♂♂)	PAL
64	<i>Pardosa palustris</i> (Linnaeus, 1758)	T (1♂)	HOL
65	<i>Pardosa prativaga</i> (L.Koch, 1870)	R (5♀♀)	EUS
66	<i>Pardosa pullata</i> (Clerck, 1757)	T (1♂)	ECA
67	<i>Pirata latitans</i> (Blackwall, 1841)	R (7♀♀, 7♂♂)	EUR
68	<i>Trochosa ruricola</i> (De Geer, 1778)	D (1♀), E (1♀), R (1♀),	PAL
69	<i>Trochosa terricola</i> Thorell, 1856	F (1♀), W (1♂)	HOL
70	<i>Xerolycosa miniata</i> (C.L.Koch, 1834)	K (1♀)	PAL
71	<i>Xerolycosa nemoralis</i> (Westring, 1861)	Y (2♀♀, 2♂♂), U (1♀), Q (1♂), K (1♀), E (1♀), O (1♀), F (1♂)	PAL

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No	Taxa	Localities & Habitats	Zoog. cat.
PISAURIDAE			
72	* <i>Pisaura mirabilis</i> (Clerck, 1757)	N (2♀♀), S (1♂)	PAL
AGELENIDAE			
73	** <i>Histopona hauseri</i> (Brignoli, 1972)	E (1♀, 1♂)	BALK
74	** <i>Histopona myops</i> (Simon, 1885)	R (1♂)	EEU
75	* <i>Tegenaria domestica</i> (Clerck, 1757)	U (1♀)	COS
76	* <i>Tegenaria nemorosa</i> Simon, 1916	U (1♂)	NME
77	* <i>Textrix denticulata</i> (Olivier, 1789)	U (2♀♀ juv.)	EUR
CYBAEIDAE			
78	* <i>Cybaeus angustiarum</i> L.Koch, 1868	X (1♀)	EUR
79	<i>Cybaeus balkanus</i> Deltshv, 1997	U (1♂), E (3♂♂)	BALK
DICTYNIDAE			
80	* <i>Dictyna arundinacea</i> (Linnaeus, 1758)	O (1♀)	HOL
AMAUROBIIDAE			
81	* <i>Amaurobius fenestralis</i> (Stroem, 1768)	X (2♀♀), U (1♂ juv.)	ECA
82	* <i>Coelotes karlinski</i> (Kulczynski, 1906)	X (2♀♀)	SEE
83	** <i>Coelotes microlepidus</i> de Blauwe, 1973	L (1♀), B (4♀♀)	SEU
MITURGIDAE			
84	* <i>Cheiracanthium elegans</i> Thorell, 1875	P (1♀)	ECA
85	* <i>Cheiracanthium erraticum</i> (Walckenaer, 1802)	X (1♂)	PAL
86	** <i>Cheiracanthium oncognathum</i> Thorell, 1871	O (1♀)	EUR
87	** <i>Cheiracanthium pennyi</i> O. P.-Cambridge, 1873	O (1♀)	PAL
88	** <i>Cheiracanthium rupestre</i> Herman, 1879	P (3♂♂), G (1♂)	EEU
LIOCRAIDAE			
89	* <i>Phrurolithus festivus</i> (C.L.Koch, 1835)	O (1♀), U (1♀)	PAL
ZODARIIDAE			
90	* <i>Zodarion ohridense</i> Wunderlich, 1973	F (1♀, 2 juv.), Y (2♂♂)	BALK
GNAPHOSIDAE			
91	* <i>Callilepis nocturna</i> (Linnaeus, 1758)	A (1♀), O (1♀), D (1♀)	PAL
92	* <i>Drassodes lapidosus</i> (Walckenaer, 1802)	V (1♀, 1♂), Q (1♀), K (1♀), O (1♀)	PAL
93	* <i>Drassodes pubescens</i> (Thorell, 1856)	T (2♂♂)	PAL
94	* <i>Drassyllus pusillus</i> (C.L.Koch, 1833)	M (1♀)	PAL
95	* <i>Drassyllus villicus</i> (Thorell, 1875)	R (1♀)	EUR
96	* <i>Gnaphosa bicolor</i> (Hahn, 1833)	L (1♂), R (1♂)	EUR
97	* <i>Haplodrassus dalmatensis</i> (L.Koch, 1866)	P (1♂)	PAL
98	* <i>Haplodrassus signifer</i> (C.L.Koch, 1839)	W (1♀, 1♂), A (1♀), G (1♀)	HOL
99	* <i>Micaria albovittata</i> (Lucas, 1846)	D (2♀♀, 2 juv.), O (1♀), R (2♀♀), U (1♀, 1♂)	PAL
100	** <i>Micaria formicaria</i> (Sundevall, 1831)	K (1♀)	PAL
101	** <i>Micaria guttulata</i> (C. L. Koch, 1839)	W (1♀)	ECA
102	* <i>Micaria pulicaria</i> (Sundevall, 1831)	W (1♂)	HOL
103	** <i>Micaria rossica</i> Thorell, 1875	U (2♀♀)	HOL
104	* <i>Nomisia exornata</i> (C. L. Koch, 1839)	O (2♀♀)	ECA

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No	Taxa	Localities & Habitats	Zoog. cat.
105	** <i>Zelotes apricorum</i> (L. Koch, 1876)	O (1♀)	ETU
106	* <i>Zelotes subterraneus</i> (C.L.Koch, 1833)	M (1♀)	PAL
107	** <i>Zelotes talpinus</i> (L. Koch, 1872)	T (1♀)	EUR
ZORIDAE			
108	* <i>Zora spinimana</i> (Sundevall, 1833)	E (1♂), R (2♂♂)	PAL
SPARASSIDAE			
109	* <i>Micrommata virescens</i> (Clerck, 1757)	U (1♀, 1juv.), Q (1♂, 2 juv.), N (1 juv.), E (1♂), O (1♀)	PAL
PHILODROMIDAE			
110	* <i>Paratibellus oblongiusculus</i> (Lucas, 1846)	O (1♂)	ECA
111	* <i>Philodromus cespitum</i> (Walckenaer, 1802)	U (1♀)	HOL
112	* <i>Philodromus collinus</i> C.L.Koch, 1835	O (1♂)	EUR
113	** <i>Philodromus vagulus</i> Simon, 1875	X (1♀, 1♂), U (1♀)	EUR
114	* <i>Thanatus formicinus</i> (Clerck, 1757)	V (1♀, 1♂)	HOL
115	** <i>Thanatus vulgaris</i> Simon, 1870	K (1♂)	HOL
116	* <i>Tibellus oblongus</i> (Walckenaer, 1802)	U (1♀), V (1♀)	HOL
THOMISIDAE			
117	** <i>Heriaeus graminicola</i> (Doleschall, 1852)	K (1♀), D (1♀), P (1♂)	ECA
118	* <i>Thomisus onustus</i> Walckenaer, 1806	U (1♀), D (1♀)	PAL
119	<i>Xysticus audax</i> (Schrank, 1803)	X (1♂)	PAL
120	* <i>Xysticus cristatus</i> (Clerck, 1757)	T (3♂♂)	PAL
121	* <i>Xysticus erraticus</i> (Blackwall, 1834)	P (1♂)	EUR
122	* <i>Xysticus kochi</i> Thorell, 1872	K (1♀), P (1♀), U (1♂)	EMC
123	* <i>Xysticus lanio</i> C.L.Koch, 1835	F (1♂)	PAL
124	* <i>Xysticus luctuosus</i> (Blackwall, 1836)	V (2♀♀)	HOL
125	* <i>Xysticus macedonicus</i> Šilhavý, 1944	B (1♀), F (1♀), O (2♀♀, 2 juv.),	BALK
126	** <i>Xysticus ninnii</i> Thorell, 1872	R (1♂), K (1♂), P (1♂), D (2♂♂)	PAL
127	* <i>Xysticus robustus</i> (Hahn, 1832)	A (2♀♀, 1♂), R (2♂♂), P (1♂)	ECA
SALTICIDAE			
128	** <i>Aelurillus v-insignitus</i> (Clerck, 1757)	R (1♂)	PAL
129	* <i>Euophrys frontalis</i> (Walckenaer, 1802)	O (1♀)	PAL
130	* <i>Evarcha falkata</i> (Clerck, 1757)	U (1♂)	PAL
131	* <i>Heliophanus auratus</i> C.L.Koch, 1835	S (1♂), F (4♀♀), K (1♀, 1♂ juv.), O (6♀♀)	PAL
132	* <i>Heliophanus cupreus</i> (Walckenaer, 1802)	O (1♂)	PAL
133	** <i>Heliophanus lineiventris</i> Simon, 1868	M (1♀)	PAL
134	** <i>Pellenes seriatus</i> (Thorell, 1875)	A (1♀)	ECA
135	* <i>Philaeus chrysops</i> (Poda, 1761)	J (1♂)	PAL
136	* <i>Salticus scenicus</i> (Clerck, 1757)	A (1♂)	HOL
137	* <i>Salticus zebraneus</i> (C.L.Koch, 1837)	U (1♀)	PAL
138	* <i>Sitticus zimmermanni</i> (Simon, 1877)	U (1♂ juv.)	PAL

Zoogeographical categories and abbreviations used: BALK – Balkan endemite; COS – Cosmopolitan; ECA – Europeo-Centralasiatic; EEU – East European; EMC – Europeo-Mediterrano-Centralasiatic; ETU – Europeo-Turanian; EUR – European; EUS – Europeo Siberian; HOL – Holartic; MCA – Mediterraneo-Centralasiatic; NME – Nort Mediterranean; PAL – Palaearctic; SEE – South-East European; SEU – South European, WPA – West Palaearctic
* new for Šar Planina Mt.; ** new for Macedonia.

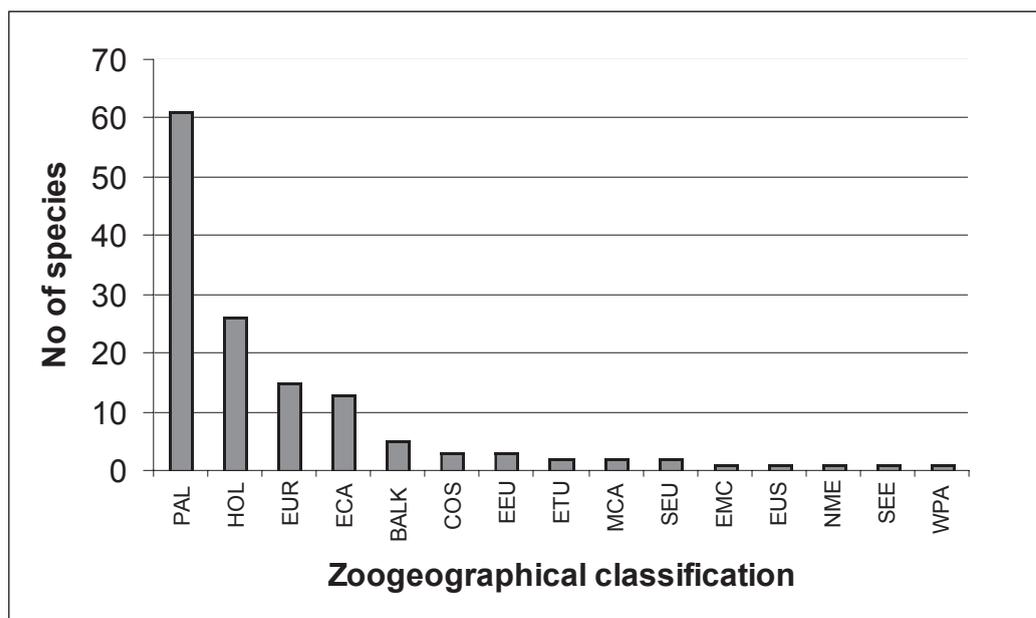


Fig. 2 Zoogeographic classification of registered species on Šar Planina Mt.
Слика. 2 Зоогеографска припадност на утврдените видови на Шар Планина

Mt. is second locality in Macedonia. It was described from the type locality Ohrid, south Macedonia. The finding of the last two mentioned species shows that they have much wider distribution in the country.

Coelotes karlinskii (Kulczynski 1906) was noted for Macedonia (Polenec & Nikolič 1988) without exact locality.

Histopona hauseri (Brignoli, 1972) was known only from caves on islands Corfu and Zante in Greece (Deeleman-Reinhold 1983).

Heliophanus lineiventris was included in the list of Macedonia spiders (Blagoev, 2002). It was cited from Drensky (1936), who cited the species from Fage (1921). The locality presented for this species is "Zeitenlik", on the territory of Greece. Thus, the record on Šar Planina Mt. should be considered as first for the Macedonian spider fauna.

CONCLUSIONS

A total of 138 species from 22 families were established occurring in different habitats of Šar Planina Mountain. For the first time reported for Šar Planina Mt. are 106 species, 27 from which are new to the Macedonian fauna.

The spiders of Šar Planina Mt. can be classified in 15 zoogeographical categories. The character of the spider fauna is defined by the presence of Palearctic and Holarctic species, together representing 63.8 %.

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Прилог кон познавањето на пајациите на Шар Планина, северозападна Македонија

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РЕЗИМЕ

Според литературни податоци, вкупниот број видови пајаци за Шар Планина беше 43 од 5 фамилии.

Овој труд е резултат на истражувањата спроведени во периодот 07-12.07.1995 и 08-22.07.1998 година во рамките на истражувачкиот проект “Квалитативни истражувања на флората и фауната на Шар Планина” организиран од Истражувачкото друштво на студенти биолози.

Вкупно 138 вида пајаци од 22 фамилии (Scytotidae-1, Segestriidae-1, Dysderidae-3, Theridiidae-13, Lyniphiidae-13, Tetragnathidae-3, Araneidae-14, Lycosidae-23, Pisauridae-1, Agelenidae-5, Cybaeidae-2, Dictynidae-1, Amaurobiidae-3, Miturgidae-5, Liocranidae-1, Zodariidae-1, Gnaphosidae-17, Zoridae-1, Sparassidae-1, Philodromidae-7, Thomisidae-11, Salticidae-11) се најдени на Шар Планина. Од нив 106 се нови за проучуваното подрачје, а 27 се нови за фауната на Република Македонија.

Пајациите на Шар Планина се класифицирани во 15 зоогеографски категории. Зоогеографскиот карактер на аранеофауната на Шар Планина е определен од палеартичките и холарктичките видови.